

**Notice of Allowability**

Application No.

10/643,161

Examiner

Eduardo Colon Santana

Applicant(s)

KURECK, AARON S.

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to applicant's amendment filed on 8/15/2006.
2. ☒ The allowed claim(s) is/are 1-12 and 15-24.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
LINCOLN DONOVAN  
SUPERVISORY PATENT EXAMINER

**DETAILED ACTION**

1. Applicant's amendments filed on 8/15/2006 has been received and entered in the case.
2. Applicant's amendment and/or response with respect to the claims have been considered.

***Drawings***

3. The replacement sheets of drawings were received on 8/15/2006. These sheets of drawings are acceptable.

***Allowable Subject Matter***

4. Claims 1-12 and 15-24 are allowed.
5. The following is an examiner's statement of reasons for allowance:

**CLAIMS 1, 8, 9, 15, 16 and 24:** In view of the limitation the prior art does not disclose alone or in combination a system and method for controlling a velocity vector of an overhead crane having a single motor; a variable frequency drive (VFD); a control (master) switch; a hydraulic brake; a processing unit, wherein the processing unit converts an output vector of the motor to an amount of voltage, current and frequency, which maintains the frequency level transferred from the VFD to the motor equal to the frequency in the motor to maintain the velocity vector of the overhead crane.

**CLAIM 21:** In view of the limitation the prior art does not disclose alone or in combination a control system for a crane having a master switch, wherein a motor drive includes software responsive to the master switch control signal and an output vector of a motor,

wherein the software is adapted to provide a speed match by adjusting the operating frequency and the operating voltage to match the output vector signal before a master switch control signal changes.

**CLAIM 22:** In view of the limitation the prior art does not disclose alone or in combination a method for eliminating the open circuit voltage decay of a motor by determining the present voltage and frequency of the motor and transferring a voltage level at a frequency level from a variable frequency drive equal to the present voltage and frequency of the motor to keep the motor magnetized.

**CLAIM 23:** In view of the limitation the prior art does not disclose alone or in combination a method of preventing a motor from driving into a brake wherein after determining the torque input of a motor, the direction of movement and have applied the brakes, sets a torque input to approximately zero and proportional to the direction of movement and using retarding torque when the brake has been applied and the torque input is opposite to the direction of movement.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eduardo Colon Santana whose telephone number is (571) 272-2060. The examiner can normally be reached on Monday thru Thursday 6:30am - 5:00pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-2800 X.37. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Eduardo Colon Santana  
Examiner  
Art Unit 2837

ECS  
October 27, 2006



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